

Note of joint Land Use and Air Quality Groups Meeting – 15 January 2018

Attendees

Afonydd Cymru

WG 1

WG 2

WG 3

WG 4

Game and Wildlife Conservation Trust

Farmers Union Wales

Community Energy Wales

Coed Cymru

Public Health Wales

Keep Wales Tidy

Welsh Local Government Association

National Farmers Union – Cymru

Chartered Institute of Wales Management (CIWM) Cymru

Natural Resources Wales

WG 5

BHF Cymru

WG 6

WG 7

CAAV

CONFOR

DWR Cymru

WLGA

National Trust

Wildlife Trust

TFA

RSPB

CLA 1

CLA 2

NRW 1

NRW 2

WG 8

NSA

WG 9

WG official 4 explained that both the land use and air quality sub-groups would continue, but that the format would change to focus smaller task and finish groups on specific issues. The timetable for future meetings would not be solely governed by the Cabinet Secretary's Brexit Roundtable (even though the sub-groups would continue to report into the main Round table) because Brexit is just one hurdle on the way to developing and realising our long term goals for agriculture and land use in Wales.

Developments with meetings between the Welsh Government and the other administrations over UK frameworks may also drive sub-group activities. Individual attendees highlighted specific issues such as progressing the Nature Recovery Plan, or the Clean Air Plan for Wales. Both of these are examples of what would be picked up by smaller focused groups.

Wildlife Trust Wales official pointed out that stakeholder organisations also have their own work streams which shouldn't be forgotten about, as they can offer input into the sub-groups.

There was widespread agreement that the Welsh Government need to keep the pace up – we started early and strongly with stakeholder engagement, but this has to turn into action, and UK Government outputs should not prevent us from putting out a radical, yet feasible proposition.

ACTION: WG official 4 and WG official 3 to circulate details of future meetings including timetables and details of smaller focused groups.

Group discussions

WG official 3 outlined the 3 objectives previously set by the air quality group to drive group discussions;

1. Quantifiable outcomes in relation to Air and Climate that can be delivered through changes to land management practice.
2. The two subsets of quantifiable outcomes: 1) those sought by legislation/regulation that we are bound to deliver and 2) those relating to improvement over and above compliance limits.
3. The availability of evidence that demonstrates a causal connection between specific changes to land management practice and the delivery of the specific outcome/s.

With 3 other issues to consider in addition if time allowed;

4. GHG reduction for the agriculture and Land Use, Land-Use Change and Forestry (LULUCF) sectors

5. Bioeconomy (use of biomass from forests and agricultural land to replace fossil based materials – energy, plastics etc.)
6. Emissions reduction from fertilizer/nutrient management/AD for slurry management eg smarter agriculture, whilst avoiding perverse initiatives eg using high grade land to grow maize solely for feeding into AD.

Group 1 output

- The 3 main villains of air quality are;
 1. Soil particulates (can be reduced by soil restoration, and building up soil organic content),
 2. Diesel fumes (replacement of older engines / generators for cleaner kit)
 3. Ammonia from eg poultry sheds – ecologically can be damaging to lichen populations etc, as well as impacts on rural / semi-rural populations.
- Peat land and natural habitat management will all contribute to air quality improvement.
- Species specific tree planting can absorb airborne particulates if planted at the correct locations.
- Modelling needed to develop proxy indicators to underpin payment models.
- Increase take up of known best practice.
- Payments will have to accommodate volatility in markets to ensure take up of actions.
- Outcomes need be designed in the dynamic context of SMNR.
- Payments need to take account of training, licences, accreditation.
- Payments for take up of cleaner vehicle / machinery technology to replace old diesel kit.

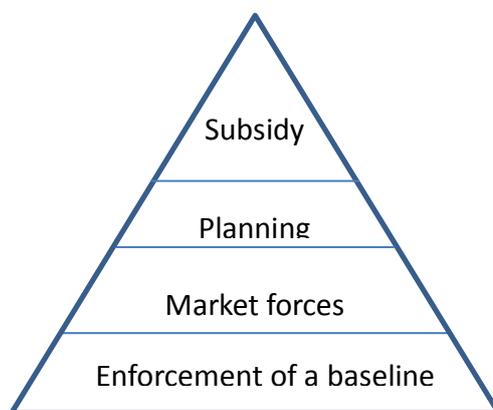
Group 2 – output

- Climate Smart Agriculture needs to be considered before other measures brought in.
- Legitimate agricultural use of waste products need to be fully considered.
- Main challenge is the excess production of slurry compared to what we need / can easily use. Economics of slurry need to be fully understood.
- Soil Organic matter is a robust quantifiable outcome.

- 'All wastes' should be re-used or recycled.
- AD is an important opportunity, but full training, planning and controls should be in place.
- Challenge in the scale of delivering / monitoring small changes across a whole range of activities to deliver significant changes overall.
- Need a clear positive vision – little steps to enable the realisation of overall outcomes.
- All benefits of changes should be defined – air, soil, water, people, biodiversity...
- Economic levers are simple. Reclaimed phosphates can be reused / re-sold.
- Precision farming – demonstrate benefits rather than resort to regulation.

Group 3 – output

- Reinforce the idea that growing crops on prime land specifically for biomass is not best use of high grade land.
- In a land use hierarchy, enforcement of a baseline should come first, followed by economics / market forces, followed by planning, with subsidy as the final step.



Group 4 – output

- Determine the regulatory floor
 - determine if we understand what land use can deliver, and do we have evidence to back this up?
 - Do we need a regulatory floor for woodland / forestry? Is UKFS enough?

- Conflicts / trade-offs - need to be able to determine best outcome where multiple outcomes are possible.
- If paying for outcomes, is there a way of scaling this up to encourage collaborative working? Uplifts for multiple outcomes? GMEP / ERAMMP can inform us on multiple outcomes.
- Need to determine possibilities for tenanted land.
- How do we measure impact if causal links missing for many issues?
- Providing opportunities for public access, does not guarantee that access will be used. Can we pay for car parks, linking up sites. Needs to be economically viable.
- Determine just how much land use can impact air quality.
- Training needed so land managers can understand how their actions can impact air quality. Especially true for unintended consequences eg biomass (to reduce energy usage) resulting in air quality issues.

Group 5 – output

- Better enforcement of existing regulations – but consider of regulation is the appropriate mechanism – education might be better.
- Need a level playing field between farming and industry.
- Air quality issues are not uniform, so different issues in different locations requiring different solutions.
- Need to be able to assess impact of different interventions in different locations.

Further input from group 5 provided later by email;

- 1) This is presumably looking at 'positive' outcomes – to establish outcomes you first need to understand the current state. Whilst for some areas this is known, the SoNaRR report identified there were large gaps in our understanding and data in respect of 'land condition'. Depending on the priority given to these areas, the gaps in data and knowledge need to be filled before we can consider changes to land management practice that will deliver quantifiable outcomes.

For those areas where we believe we understand the current state we need to decide whether the data/knowledge is suitable for determining or drawing comparisons from changes in land use practice such that a quantifiable outcome can actually be ascertained. What variables or influences exist that may impact on the

assessment process (such as weather/pollutant loading over time/the time scale for assessment being too long).

- 2) There is a raft of legislation and regulations aimed at protecting land, mainly from human activity, but do we actually have the resources and finances to enforce the regulations that we are 'bound to deliver'? An example would be the appropriate enforcement of slurry spreading on agricultural land, particularly in south west Wales. Whilst not advisable to rip up the regulations, a serious long term review of them, along with assessment of different delivery mechanisms, should take place. Education should be part of the delivery mechanism.

A lot of existing legislation attempts to minimise impacts and effectively achieve a status quo for existing conditions. However, it is questionable as to how sustainable this is. For example, an Environmental Permit condition relating to the state of ground on which a process operates requires that a base line survey be carried such that on cessation of operations the ground can be returned to the state it was in when the baseline survey was carried out, irrespective of how poor that was. Likewise, for nitrogen dioxide we aim for an Objective of $40\mu\text{g}/\text{m}^3$ despite knowing that for some people this level of pollution can affect their health (it is acknowledged that Policy looks to reduce this where possible).

So from a sustainability and future generation's perspective we should be looking to minimise pollution, in all its forms, wherever possible.

- 3) Evidence was mentioned in 1) above, and the gaps that exist. Conversely there may be more evidence available than we realise. After discussions at the last meeting it is evident that there are lots of organisations gathering information and data for a whole range of reasons and purposes but this data and potential evidence is not really 'flowing'. We need a mechanism by which it can be pooled and used/compared/facilitate decisions on the current situation and where effort is needed to improve. The pooling of the information could greatly assist the understanding of how land use practice impacts on ecosystems.

Group discussion on the day –

The Group considered there needed to be better enforcement of existing regulations, which I agree with but refer also to 2) above.

It was felt a level playing was needed between industry and agriculture in terms of penalties and regulations.

It was pointed out that every area that has an air quality 'issue' is unique, and therefore the means to improve air quality in different areas will be potentially different due to a host of reasons. (This could be due to location characteristics, traffic volume, met conditions, dispersion potential etc.)

We need more effective means of measuring air quality across a range of scenarios, such as ecological impact (so as to determine impacts from land use), ability to determine impact of Action Plan interventions, ability to determine peak hours impacts that are unlikely to be identified through use of diffusion tubes, and a means

to alert vulnerable members of society such that they can keep themselves safer from elevated levels of pollution.

As we strive to improve air quality, predominantly through reducing NO₂ and particulates, we need to be mindful of unintended consequences such as over-compensating and creating situations such as elevating ozone levels. Holistic approaches are required for interventions in order not to create other issues.

Concerns exist in respect of new chemical pollutants created from the catalytic convertor technology employed on petrol vehicles.

We need to be mindful of the scientific concept that we neither create nor destroy anything, but merely change its state. Therefore we need to manage that change process to maximise the benefits from it, minimise the pollutant and damaging impacts from change, and ensure that we make the most of the change process before there is no more usefulness to be had and avoid unnecessary pollution.

A current topical example would be single use plastics, although derived from the petroleum industry as by-products, which are not recycled and in many cases are perhaps not really necessary in the first place, particularly where used for packaging.